Synopsis of research work

On

EFFECT OF A RAISED CONSCIOUSNESS ON THE DIFFUSION OF INNOVATION

In pursuance of the requirements for the award of the degree of:

DOCTOR OF PHILOSOPHY

SUBMITTED BY

Neha Sinha

UNDER THE SUPERVISION OF

PROFESSOR SHALINI NIGAM

DEPARTMENT OF MANAGEMENT

FACULTY OF SOCIAL SCIENCES

AND

CO-SUPERVISION OF

PROFESSOR NANDITA SATSANGEE

DEPARTMENT OF FOUNDATIONS OF EDUCATION

FACULTY OF EDUCATION

DEPARTMENT OF MANAGEMENT, FACULTY OF SOCIAL SCIENCE

DAYALBAGH EDUCATIONAL INSTITUTE (DEEMED UNIVERSITY)

DAYALBAGH, AGRA – 282005

2020

CONTENTS

SECTION 1	**Introduction**	
1.1	What is Diffusion?	2
1.2	What is Innovation?	2
1.3	The Diffusion of Innovation Theory	2
1.4	Innovation Adoption Curve and Adopter Catégories	5
1.5	What is Intuitive Consciousness?	7
	1.5.1 What is Consciousness, Intuition and Insight?	8
	1.5.2 Intuition	8
	1.5.3 Insight	9
	1.5.4 Fundamental Axiom of Spiritual Consciousness	9
	1.5.5 The present scenario of Consciousness in Education	9
1.6	Complexity of the problem	10
1.7	Systems approach to problem solving	11
1.8	Hard Systems Approach	11
SECTION 2	**Literature Review**	12
2.1	Models of Diffusion of Innovation	12
2.2	Characteristics of adopters in the bell curve	16
2.3	Major Papers	18
2.4	Classification of Literature Review	20
2.5	Summary of Research gap: Global perspective	
SECTION 3	**Conceptual Framework**	**27**
SECTION 4	**Overview of the Proposed Research Study**	29
4.1	Need of the study	29
4.2	Objectives of the study	30
4.3	Hypotheses of the study	30
4.4	Research methodology	31
4.4	Research methodology	31

4.4.1Research design 31

4.4.2 Sample Plan 31

4.4.3 Sampling techniques 31

4.4.4 Sample Size 31

4.4.5 Data collection 31

4.4.6 Expert profile 32

4.4.7 Tools and techniques to be used (proposed) 32

4.4.8 Tools and techniques of the Systems approach 32

4.4.9 Phases of proposed research 34

4.4.10 Analysis of the case study approach 35

SECTION 5 Proposed chapters of the thesis **35**

SECTION 6 Références/ Bibliography 36

List of Abbreviations

DOI	Diffusion of Innovation
IC	Intuitive consciousness
CQi	Consciousness quotient
CLD	Causal Loop Diagram
DEI	Dayalbagh Educational Institute
ROD	Rate of Diffusion
FMICMAC	Fuzzy Cross Impact Matrix Multiplication Applied to Classification
ICT	Information and Communication Technology
IoT	Internet of things
IT	Information Technology
ISM	Interpretive Structural Modeling
SEM	Structural Equation Modeling
SSIM	Structural Self-Interaction Matrix
ROD	Rate of Diffusion
ROD OF I	Rate of Diffusion of Innovation

SECTION 1

INTRODUCTION

The diffusion of innovations is a general framework about social change that has seen application in many disciplines, including engineering, marketing, management, natural resources, agriculture, high technology, education, political science, anthropology, sociology, journalism, and communication. Contemporary important issues among diffusion scholars are the implementation of innovations in organizations, the variables that affect sustained use of innovations, and sociometric analysis as a means of accelerating diffusion. Dearing, James & Lee, Sangwon. (2016).

Innovation is the process of a newer technology replacing, updating or enhancing an older one. In short it is the spread of new technology amongst the population. Diffusion is now understood to be an intrinsic part of the innovation process since the feedback process further promotes the innovation. In fact, for developing countries diffusion is the all-important part of innovation. Diffusion of innovation is the speed and manner of a new idea is received in the market.

Diffusion is not only the means by which innovations become useful by being spread throughout a population, it is also an intrinsic part of the innovation process, as learning, imitation, and feedback effects which arise during the spread of a new technology enhance the original innovation. Understanding the diffusion process is the key to understanding how conscious innovative activities conducted by firms and governmental institutions, activities such as funding research and development, transferring technology, launching new products or creating new processes, produce the improvements in economic and social welfare that is usually the end goal of these activities.

There are many models and variables that are responsible for its rate. It would not be wrong to say that without diffusion innovation would have no impact on society, technological or economical. (Bronwyn H. Hall, 2004)

Rosenberg made the following observation about the diffusion of innovations: “in the history of diffusion of many innovations, one cannot help being struck by two characteristics of the diffusion

process: its apparent overall slowness on the one hand, and the wide variations in the rates of acceptance of different inventions, on the other." (Rosenberg, 1976).

Consciousness is intrinsic to the grand cosmos, both at macrocosmic as well as microcosmic levels. Man, a creation on the planet earth happens to be a perfect microcosm of the macrocosm. Spirit–Mind–Brain consciousness interactions are at the microcosmic level analogous to these are interactions between Supreme being – Universal mind – Physical universe at the microcosmic levels

1.1 What is Diffusion?

The word diffusion derives from the Latin word, diffundere, which means "to spread out. Diffusion is net movement of anything (e.g., atom, ions, molecules) from a region of higher concentration to a region of lower concentration. Diffusion is driven by a gradient in concentration.

The concept of diffusion is widely used in many fields, including physics (particle diffusion), chemistry, biology, sociology, economics, and finance (diffusion of people, ideas and of price values). The central idea of diffusion, however, is common to all of these: an object (e.g. atom, idea, etc.) that undergoes diffusion spreads out from a point or location at which there is a higher concentration of that object.

1.2 What is Innovation?

The process of translating an idea or invention into a good or service that creates value or for which customers will pay. To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need. Innovation involves deliberate application of information, imagination and initiative in deriving greater or different values from resources and includes all processes by which new ideas are generated and converted into useful products. In business, innovation often results when ideas are applied by the company in order to further satisfy the needs and expectations of the customers.

1.3 The Diffusion of Innovation Theory

Diffusion of Innovation (DOI) Theory, developed by E.M. Rogers in 1962, is one of the oldest social science theories. It originated in communication to explain how, over time, an idea or product gains

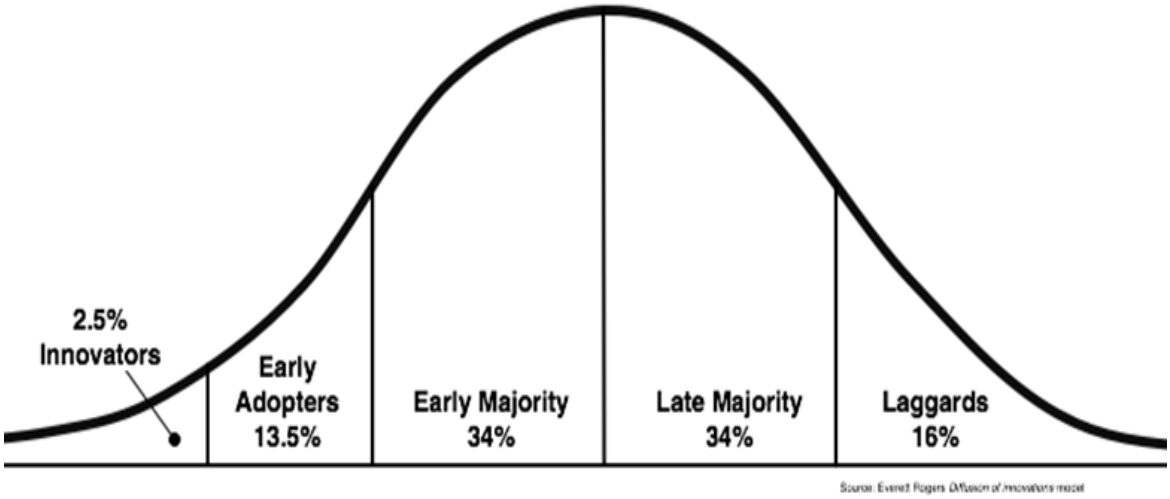
momentum and diffuses (or spreads) through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behaviour, or product. Adoption means that a person does something differently than what they had previously (i.e., purchase or use a new product, acquire and perform a new behaviour, etc.). The key to adoption is that the person must perceive the idea, behaviour, or product as new or innovative. It is through this that diffusion is possible.

Adoption of a new idea, behaviour, or product (i.e., "innovation") does not happen simultaneously in a social system; rather it is a process whereby some people are more apt to adopt the innovation than others. Researchers have found that people who adopt an innovation early have different characteristics than people who adopt an innovation later. When promoting an innovation to a target population, it is important to understand the characteristics of the target population that will help or hinder adoption of the innovation. There are five established adopter categories, and while the majority of the general population tends to fall in the middle categories, it is still necessary to understand the characteristics of the target population. When promoting an innovation, there are different strategies used to appeal to the different adopter categories.

1. Innovators - These are people who want to be the first to try the innovation. They are venturesome and interested in new ideas. These people are very willing to take risks and are often the first to develop new ideas. Very little, if anything, needs to be done to appeal to this population.
2. Early Adopters - These are people who represent opinion leaders. They enjoy leadership roles and embrace change opportunities. They are already aware of the need to change and so are very comfortable adopting new ideas. Strategies to appeal to this population include how-to manuals and information sheets on implementation. They do not need information to convince them to change.
3. Early Majority - These people are rarely leaders, but they do adopt new ideas before the average person. That said, they typically need to see evidence that the innovation works before they are

willing to adopt it. Strategies to appeal to this population include success stories and evidence of the innovation's effectiveness.

4. Late Majority - These people are skeptical of change and will only adopt an innovation after it has been tried by the majority. Strategies to appeal to this population include information on how many other people have tried the innovation and have adopted it successfully.
5. Laggards - These people are bound by tradition and very conservative. They are very skeptical of change and are the hardest group to bring on board. Strategies to appeal to this population include statistics, fear appeals, and pressure from people in the other adopter groups.



Source: http://blog.leanmonitor.com/early-adopters-allies-launching-product/

The stages by which a person adopts an innovation, and whereby diffusion is accomplished, include awareness of the need for an innovation, decision to adopt (or reject) the innovation, initial use of the innovation to test it, and continued use of the innovation. There are five main factors that influence adoption of an innovation, and each of these factors is at play to a different extent in the five adopter categories.

1. Relative Advantage - The degree to which an innovation is seen as better than the idea, program, or product it replaces.
2. Compatibility - How consistent the innovation is with the values, experiences, and needs of the potential adopters.

3. Complexity - How difficult the innovation is to understand and/or use.
4. Trial ability - The extent to which the innovation can be tested or experimented with before a commitment to adopt is made.
5. Observability - The extent to which the innovation provides tangible results.

Limitations of Diffusion of Innovation Theory

There are several limitations of Diffusion of Innovation Theory, which include the following:

- Much of the evidence for this theory, including the adopter categories, did not originate in public health and it was not developed to explicitly apply to adoption of new behaviours or health innovations.
- It does not foster a participatory approach to adoption of a public health program.
- It works better with adoption of behaviours rather than cessation or prevention of behaviours.
- It doesn't take into account an individual's resources or social support to adopt the new behaviour (or innovation).

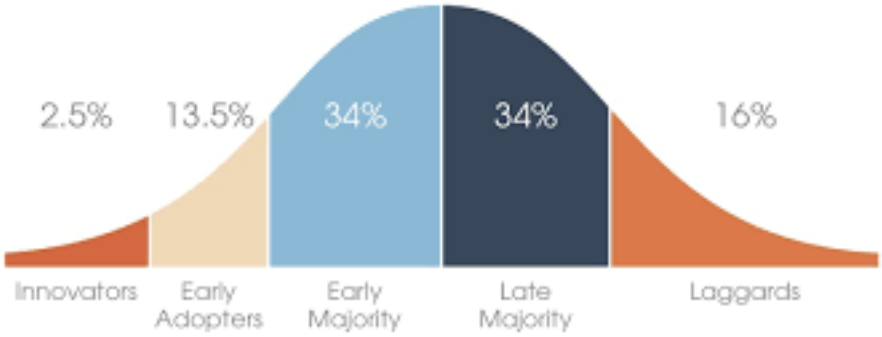
This theory has been used successfully in many fields including communication, agriculture, public health, criminal justice, social work, and marketing. In public health, Diffusion of Innovation Theory is used to accelerate the adoption of important public health programs that typically aim to change the behaviour of a social system. For example, an intervention to address a public health problem is developed, and the intervention is promoted to people in a social system with the goal of adoption (based on Diffusion of Innovation Theory). The most successful adoption of a public health program results from understanding the target population and the factors influencing their rate of adoption.

1.4 Innovation Adoption Curve and Adopter Categories:

Adopter categories are the classifications of the members of a social system on the basis of innovativeness, the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than other members of a system. The standard five adopter categories that are widely followed today in diffusion research, and their applications. Adopter distributions tend to follow an S-

shaped curve over time and to approach normality. The continuum of innovativeness can be partitioned into five adopter categories (innovators, early adopters, early majority, late majority, and laggards) on the basis of two characteristics of a normal distribution, the mean and the standard deviation. The dominant attributes of each category are: Innovators-venturesome; early adopters-respect; early majority-deliberate; late majority-skeptical; and laggards-traditional. The relatively earlier adopters in a social system are no different from later adopters in age, but they have more years of formal education, are more likely to be literate, and have higher social status, a greater degree of upward social mobility, and larger-sized units, such as farms, companies, schools, and so on. These characteristics of adopter categories indicate that earlier adopters have generally higher socioeconomic status than do later adopters. Earlier adopters in a system also differ from later adopters in personality variables. Earlier adopters have greater empathy, less dogmatism, a greater ability to deal with abstractions, greater rationality, greater intelligence, a more favourable attitude toward change, a greater ability to cope with uncertainty and risk, a more favourable attitude toward science, less fatalism and greater self-efficacy, and higher aspirations for formal education, higher-status occupations, and so on. Finally, the adopter categories have different communication behaviour. Earlier adopters have more social participation, are more highly interconnected in the interpersonal networks of their system, are more cosmopolite, have more contact with change agents, greater exposure to mass media channels, and greater exposure to interpersonal communication channels, engage in more active information seeking, and have greater knowledge of innovations, and a higher degree of opinion leadership. Past research thus shows many important differences between earlier and later adopters of innovations in (1) socioeconomic status, (2) personality variables, and (3) communication behaviour. The distinctive characteristics of the five adopter categories mean that these adopter categories can be used for audience segmentation, a strategy in which different communication channels and/or messages are used to reach each sub audience.

Source: http://blog.leanmonitor.com/early-adopters-allies-launching-product



Source: http://blog.leanmonitor.com/early-adopters-allies-launching-product/

The innovation adoption curve classifies the entry of users into various categories, based on their willingness to accept new technology or an idea. It is useful in breaking down or segregating consumers into five different segments or categories such as innovators, early adopters, early majority, late majority, and laggards.

1.5 What is Intuitive Consciousness?

Once any level of a spiritual connection is established with the super- positive pole. We begin to receive information in form of visions, light, sound and bliss and intuitive information. This heightened level of awareness brings about elevated cognitive functioning with feelings of better connectedness and belonging. Our objectives are more clearly defined and this in turn brings about a change in perspective of seeing the larger picture.

Such a connectivity with the Super positive pole to whatever degree gives rise to Hierarchical order theory of consciousness and SCANE correlates (Spiritual, Cognitive and Neural-Environmental Correlates). These correlates are Satyam -Shivam-Sundaram (Truth- Knowledge-Beauty) and the more exalted version "Sat- Chit- Anand" where Sat means the truth of love or inseparability, Chit means the conscious knowing or the reality of immortal existence, and Anand means the bliss of love or experiencing the joy of unity consciousness. This triad of consciousness of the grand macro/ micro–

cosmology ranging from the physical/ material reality of science of outer experience at the tertiary level, through the semi-abstract (real/abstract) cognitive science (transcendental meditation) of outer- inner experience at the secondary level, to the external abstract spiritual science (ultra- transcendental meditation) of ultimate inner experience at the primary level (Satsangi, 2014)

1.5.1 What is Consciousness, Intuition and Insight?

Consciousness is intrinsic to the grand cosmos, both at microcosmic as well as microcosmic levels. Man, a creation on planet earth happens to be a perfect microcosm of the macrocosm. Spirit – mind – brain consciousness interactions are at the microcosmic level analog us to question is these interactions between supreme being – universal mind – physical universe at the microcosmic levels (Satsangi, P.S., 2010)

Consciousness is defined as the state of awareness or perception of the self of the external environment. I think that consciousness is the ability of producing and acquiring knowledge about the Universe. Based on the existence of living organisms on earth, I believe that consciousness can be classified into two types which are; high level consciousness and low-level consciousness. (Njikeh, Kong. 2019).

1.5.2 Intuition

In the recent years, a growing interest in the previously neglected phenomenon of intuition (Claxton, 1988, p217) has seen the publication of several popular books on the subject (Chabris & Simons, 2010; Gladwell, 2005; Myers, 2004). Indeed, empirical research-programs investigating intuition exist in the fields of nursing, emergency medicine, business and law among others (Sinclair, 2011). Hodgkinson and Saddler Smith (2011, p52) argue that intuition is 'a legitimate subject of social scientific inquiry with important implications for educational decision-making' and present multiple empirical methods that have been used to investigate the construct in the laboratory (for detail on the methods used to study intuition see: Sinclair, 2014 and Glöckner & Witteman, 2010).

Intuition as a cognitive activity: An intuition is a tacit hunch or feeling that influences thought with little conscious effort.

Intuition as a process: The influence of tacit hunches or feelings on conscious thought. (Polanyi, 1996/2009)

1.5.3 Insight

I have come to believe that a key element in a memorable classroom experience for most people is what is call the "Ah-Ha" experience. Time and time again people tell me of an experience in a classroom setting when some concept suddenly clicked for them (Fuller, 1993).

Insight as a cognitive activity: An insight is an explicit awareness of novel relations between concepts that arrives with apparent suddenness and little awareness of processing. (Polanyi, 1996/2009)

1.5.4 Fundamental Axiom of Spiritual Consciousness

The fundamental axiom of macrocosmic/microcosmic spiritual consciousness is that the origin of the macrocosm is an infinite spiritual energy source or reservoir known as the super positive pole accompanied by the omni- quantum spiritual force field of consciousness ranging from the super positive pole of full spirituality with a nether or negative pole of depleted spirituality and each constitute fundamental element of this on the quantum spiritual force field known as the spirit force of consciousness (monopole) , Is the one which possesses prime energy and that all other forces (mental or physical) of creation or nature had been evolved by the Association of this spirit force with media (mental or physical) of different kinds. (Satsangi, P.S. 2010)

1.5.5 The present scenario of consciousness in education

The study of intuitive consciousness is no longer confined to philosophical discourse. It has gained credibility in enhancing individual potentialities in professional spheres like management, medicine, bioengineering, quantum mechanics amongst many others. The potential of intuitive consciousness in the educational field has been initiated by several institutions but it's adaption and wide scale implementation needs to be earnestly pursued.

1.6 Complexity of the problem

The process of maximizing diffusion of innovation by elevating the level of consciousness has the high scope for meeting the increasing demands and stresses and vagaries of the business and industrial world and markets and hence it shows the opportunity aspect but at the same time, there are various challenges at the enhancement and the diffusion level for preparing the students (Tuazon 2014). It would be Interesting to observe the change of variables if any in the rate of diffusion of innovation when level of consciousness is change. Since all the current variable are cognitive in nature and a change of consciousness levels would necessarily bring about a change in the cognitive functions of an individual it would not be erroneous to expect a whole hidden set of variables to further drive the ROD Also, the technology adoption has certain entry-level enabling factors (Akkeren, 1999). Also, there are possible implementation and maintenance related challenges acting as obstacles to achieve the value. The raising of the intuitive consciousness experience, infrastructure, limited awareness, low networking and management assistance, limited skills, etc. are some of the major challenges. The global examples support the success story of intuitive consciousness and its impact on academic excellence, and attributes of leadership, better worldliness, creativity, all rounded development in Physical, Mental, Emotional, Spiritual, Social and Self-Consciousness and executive functioning. Thus, it can be observed that certain numbers of enablers are pushing the rate of diffusion of innovation while some challenges are restricting this rate diffusion, where the overall purpose is to achieve certain types of value at the output like quality leadership and management, productivity enhancement, diffusion optimisation conformity, in the presence of some moderating factors that regulate the diffusion of innovation. Being in a same system, each and every factor acts as a sub-system and somehow these sub systems affects every other sub-system and other sub-systems affect them as well. This shows a non-linear complex scenario.

If visualised, all these factors are connected to each other in a complex web like structure as dependent variables and drivers (variables that drive other variables). Therefore, due to the presence of two dimensions, this creates a pluralistic enhancing intuitive consciousness between achieving the efficiency and at the same time considering its maintenance and its effect on the changed rate

of diffusion of innovation variables. Thus, a strategic framework is required in order to study the effect of an enhanced consciousness on the rate of diffusion of innovation maximisation in the presence of this complex system.

1.7 Systems approach to problem solving

The systems approach has been introduced as a response with the increasing complexity of the intuitive consciousness and rate of diffusion of innovation systems. Many techniques and approaches based on system philosophy have been developed which help in analysing various problem situations in multiple ways (Sushil 1993).

Ludwig von Bertalanffy (1972) has reported extensive developments in the field of General systems theory and discussed the trends in System Science, Mathematical systems theory, Systems technology, and systems philosophy. The systems approach is broadly divided into 'Hard' systems and 'soft systems'. Therefore, it was realised that linear or hard systems approach might not be suitable for the solving the complex and pluralistic decision-making problems and optimal strategy building. For this reason, soft systems approach emerged as a better ideology in response to the increased non-linear complexity in the business and the environment.

1.8 Hard Systems Approach

System dynamics (**SD**) is an approach to understanding the nonlinear behaviour of complex systems over time using stocks, flows, internal feedback loops, table functions and time delays. (Rahim, N. N. Hawari , Abidin, 2007)

System dynamics is an aspect of systems theory as a method to understand the dynamic behavior of complex systems. The basis of the method is the recognition that the structure of any system, the many circular, interlocking, sometimes time-delayed relationships among its components, is often just as important in determining its behavior as the individual components themselves. Examples are chaos theory and social dynamics. It is also claimed that because there are often properties-of-the-whole which cannot be found among the properties-of-the-elements, in some cases the behaviour of the whole cannot be explained in terms of the behaviour of the parts. (Radzicki ,Taylor 2008)

SECTION 2

REVIEW OF LITERATURE

The review of literature for the proposed research is performed to understand the basic concepts and insights of consciousness.

The reviewed literature comprises of 28 papers that focused the effect of an enhanced consciousness quotient on managerial and academic competency. All the papers highlighted the issues and the challenges related to both raising the consciousness and rate of the diffusion of innovation. The obtained data in almost all the papers were survey based and some domain experts wrote the articles emphasizing the enablers of the process of enhancing the consciousness quotient . There were 23 papers and articles related to the same two variables namely Rate of diffusion and consciousness in people majority of those who were students in higher education as a whole.

There are several factors that affect the rate of diffusion and consciousness. The challenges may be related to capability, awareness, resources, interest, etc. Most of the students have some or a combination of these challenges. (Patel, H., 2017).

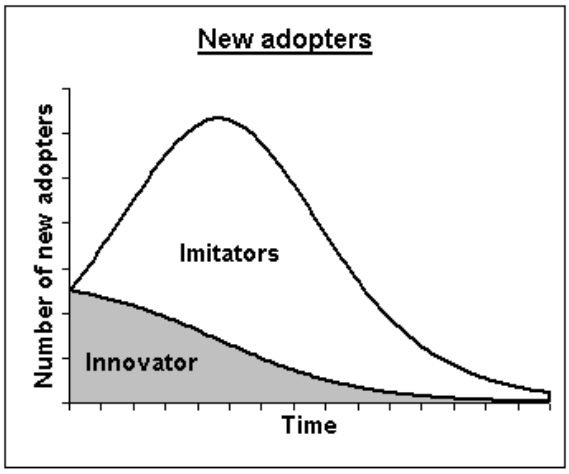
2.1 **Models of Diffusion of Innovation**

2.1.1 **Everett Rogers model : Diffusion of Innovations** : book on Diffusion of innovation- Rogers was the first proponent of the diffusion process and he goes deep into the reasons as to why diffusion is slow in some countries and relatively faster in others. The was the first to specify all the factors which directly affect diffusion namely, the innovation itself, the communication channels, Time, and a social system.**(Rogers E., 1962-2003)**

2.1.2 **Bass Model**:

"A new product growth model for consumer durables" (Bass,1969)

The Bass diffusion model was developed by Frank Bass and describes the process of how new products get adopted as an interaction between users and potential users. It has been described as one of the most famous empirical generalizations in marketing, along with the Dirichlet model of repeat buying and brand choice. The model is widely used in forecasting, especially product forecasting and technology forecasting. Mathematically, the basic Bass diffusion is a Riccati equation with constant coefficients. Prior to this, Everett Rogers published Diffusion of Innovations, a highly influential work that described the different stages of product adoption. Bass contributed some mathematical ideas to the concept. **This model assumes that mass media are important early on in the diffusion process but that as time passes, interpersonal communication becomes far more important**. **(Bass Frank, 1969)**



(Bass Frank, 1969)

2.1.3 Innovation Matrix Model

Elements of Innovation Competence

As is the case with Innovation Commitment, we don't have a system yet for quantifying Innovation Competence. While the core metric should be something like how many new ideas you execute and diffuse successfully, here are some questions you can ask to assess where you currently are along this dimension:

1. How many new ideas do you successfully execute and diffuse? All the other measures should be supporting this. If you're executing ideas, and getting them to spread, then that is the main component of Innovation Competence.

2. Are you good at all the components of the idea management process? Innovation is the process of idea management. To innovate effectively, you must be able to: generate great news ideas, select the ones that are most likely to work, implement these ideas, and then get these new ideas to spread. Morten Hansen and Julien Birkinshaw have developed a good survey that you can use to assess this. Building skill in all of these areas is essential to building innovation competence.

3. Do you practice different forms of innovation? Joseph Schumpeter identified five forms of innovation:

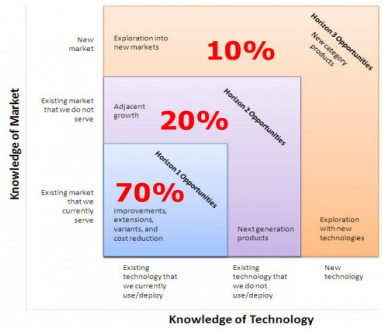
    - New product or service
    - New method of production
    - New source of supply
    - New market or application
    - New method of organizing your firm or industry

4. Research has shown that firms that innovate across more than one of these categories are more successful at innovation in general, and more profitable. In fact, the more areas that you innovate in, the better your overall outcomes are.

5. Do you practice both small and large innovation? One way to develop an effective innovation program is to encourage both smaller incremental innovations, and larger, more disruptive

innovation. You can do this by using the Three Horizons approach. This is also referred to as ambidextrous innovation.

6. Do you have an innovation portfolio? An innovation portfolio allows you to look at both innovations that extend your competence in your core markets, as well as working on ideas that extend you into new markets. Here is one way to picture this, based on the example of how Google allocates resources across their portfolio:



7. Does your firm have a culture of systematic experimentation? One of the best ways of figuring out which ideas are good, and whether or not they will work is to experiment constantly.

8. Does your firm learn from failure? This is also a critical part of building an innovation culture.

As is the case with the questions for assessing your Innovation Commitment, these are a mix of questions that are yes/no and questions that are answered along a spectrum. By looking at your answers, it will give you a bit of an idea of the level of Innovation Competence within your firm.

Unlike Innovation Commitment, it is unambiguously good to be higher on this scale. The whole point of trying to manage innovation is to make your firm more effective at actually executing ideas. The danger in increasing your Innovation Competence without also increasing Innovation Commitment is that both are needed to be sustainably successful at innovation.

Higher levels of Innovation Competence combined with lower levels of Innovation Commitment mean that you are at risk of losing your skill at innovation – it is the commitment that makes your success repeatable.

When you combine higher levels of both, then you are on your way to successful innovation. Source :http://timkastelle.org/blog/2012/04/the-innovation-matrix-explained-innovation-competence/

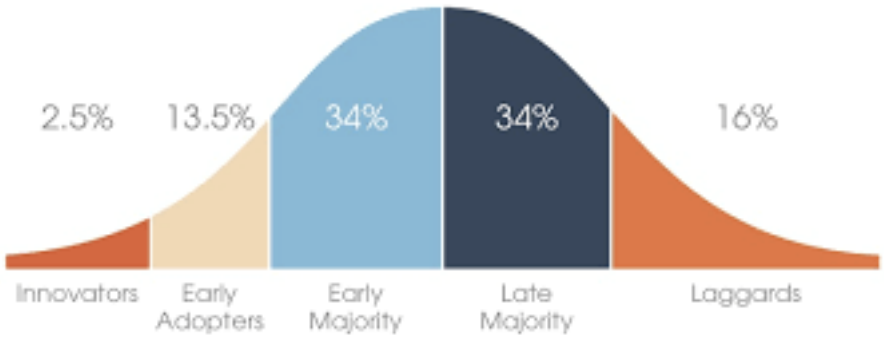
Disruptive innovation, by definition, refers to a concept, product or service that creates a new value network either by disrupting an existing market or creating a completely new market . Clayton Christensen was the first to introduce the concept of disruptive innovation in 1995.Clayton Christensen (1995).

2.1.4 Rosenburg Model

In the history of diffusion of many innovations, one cannot help being struck by two characteristics of the diffusion process its apparent overall slowness on the one hand, and the wide variations in the rates of acceptance of different inventions, on the other. (Rosenburg, 1963)

2.2 Characteristics of adopters in the bell curve

The innovation adoption curve classifies the entry of users into various categories, based on their willingness to accept new technology or an idea. It is useful in breaking down or segregating consumers into five different segments or categories such as innovators, early adopters, early majority, late majority, and laggards.



The innovation adoption curve follows a bell-shaped curve, which can be divided into five different categories. Let's discuss each one of them in detail. Usually, the innovators are the first ones to adopt

the new idea or the technology. They consist of a small percentage of the population, almost 2.5 per cent. They are the ones who are young and willing to take risks about the new technology.

Next ones are early adopters. Early adopters consist of almost 13.5%. One characteristic which differentiates this group from the others is that they have a high degree of leadership or influencing power. They are also young individuals who are willing to take that extra risk.

The third category of individuals who adopt an innovation is early majority (34%). The only difference is that here the time of adoption is slightly longer, but the percentage is higher than innovators and early adopters. We have and above – average social Status, and except change more quickly than the average.

The Fourth category is late majority (34%). The individuals in this category take a lot of time to adopt new technology. There they are the ones who will do research because they are skeptical of innovation. They adopt the new Technology because of peer pressure

Laggards is the fifth category of individuals who adopted innovation. They are reluctant to any change. By the time laggards adopt the new technology it might have already become obsolete. They are fixated on past methods or technology for their daily usage

Effect of yoga and meditation consciousness quotient and mindfulness (Ahuja 2014) Journal of consciousness exploration and research volume five issue 5 June 2014.

Effect of yoga and meditation unconsciousness experience and mindfulness what exam and comparing beginners intermediate, advanced meditators and a group of non-meditators. The results showed a significant increase in the CQ scores after the intervention. The practice had considerable effect on all dimensions of consciousness quotient over time. The impact was more and relatively immediate on social and self-consciousness quotient. There was a significant increase in scores after 60 sessions of practice of yoga and meditation. In about 20 weeks there was an increase in the scores of mental and spiritual quotients too.

2.3 Major Papers

2.3.1 Consciousness quotient as a predictor of executive functioning paper published in MIER Journal of educational studies, trends and practices November2015, volume five, number two. (Ahuja and Sharma, 2015)

Executive functioning is associated with higher order mental abilities which are required to connect past experiences with the present ones and which are required to strategically manage oneself and one's resources.

The findings based on self-reports reveal that executive functioning is moderately but significantly related to the consciousness quotient, although the relationship may vary for different executive functions. The strength of functional relationship revealed the predictive ability of CQ for cognitive flexibility and self-regulation (through regression analysis). Consciousness quotient accounts for greater variation in self-regulation as compared to cognitive flexibility it can be inferred that students with high score of CQ – I will tend to have greater long-term self-regulating abilities and cognitive flexibility than those with the lower score. The findings are found to be consistent with the product propositions of Dehaene and Maccacce, (2001) andJack Shallice, (2001) that cognitive control processes necessarily require awareness.

2.3.2 Leadership approach in relation to level of consciousness: a correlational analysis (Chauhan, we Sharma, S Satsangi, S 2013)

The relationship between scores of seven leadership factors (comprising three leadership approaches) and the level of consciousness was studied using Pearson's product moment correlation. Results indicate a significant positive correlation and two of wearing degree between consciousness and the three leadership approaches.

2.3.3 The consciousness quotient – and you, predictor for student's academic performance (Ovidiu B, Cristian Mihai, 2011)

It's the testicle analysis showed that students with high IQ I'm more likely to have a better performance. Furthermore, the moderate correlations between the CQ and the result of the academic performance

criterion suggested that people with a high seek you can perform better to the exams that the students of A low CQ level.

2.3.4 A Correlational Analysis of Physical, Mental, Emotional, Spiritual, Social and Self-Consciousness: (Ahuja, S 2014)

It is interesting to note from the results that although the inter-correlations among different dimensions of consciousness are insignificant in some cases, but not negative between any two dimensions. This leads to conclusion that all dimensions of consciousness are positively associated with each other. Thus, with the increase in consciousness in one of the dimensions, the consciousness of another dimension also increases, even if the extent is less in some cases. The findings also reveal that the highest correlation is between spiritual and self-consciousness among inter-correlations of other dimensions. The higher the self-consciousness, higher will be spiritual consciousness. The nature of bivariate relationship determined between various dimensions of consciousness can be used to develop theoretical models. This study can lead into experimental research in which the causal relations among those key variables which have significant association with other dimensions such as social consciousness, self-consciousness and spiritual consciousness can be examined under controlled conditions. It can also be extended to determination of the impact of the social consciousness or self-consciousness on spiritual consciousness, allowing a test of strong causal inference. The results of the study can be useful in developing psycho-spiritual model to determine the predictors of spiritual consciousness

2.3.5 Metacognitive Skills (Patterson J. 2011)

Metacognitive skills are strategies applied consciously or automatically during learning, cognitive activity, and communication to manipulate cognitive processes before, during, or after a cognitive activity (Flavell, 1976, 1979). Examples are executive function processes such as verbal mediation, self-regulation, planning, judgment, and self-monitoring.

2.4 Classification of Literature Review: A broad classification of the previous papers is given as follows:

1. Focus of the paper
    - Intuitive consciousness
    - Diffusion of innovation models
    - Metacognition
2. Context of the paper
    - Indian
    - International
3. Type of Data for analysis
    - Qualitative
    - Quantitative
4. Research Design
    - Exploratory
    - Descriptive
    - Analytical

Summary of Literature Review												
Title Author(s) (Year)	Category	Literature Reviewed	Focus Issue			Context		Data Type		Methodology		
			Consciousness	Metacognition	Diffusions of Innovation	Indian	International	Qualitative	Quantitative	Exploratory	Descriptive	Analytical
Reality and truth vis-a vis Wisdom (via aparavidya and paravidya) Revd Prof P. S. Satsangi (2003)	Research Article			✓		✓		✓				✓
Innovation adoption curve Everett M Rogers	General Review	✓				✓		✓			✓	✓
Diffusions of Innovation , Vol4 Simon and Schuster, (2010)	Research Paper	✓			✓		✓	✓			✓	
The Diffusion and Innovation of Muslim Organizations in Denmark. Mikkelsen, Flemming. (2019).	Research Article				✓		✓	✓		✓		
Investigating GoPro and Its Diffusion of Innovations Hambrick(2019)	Research Article				✓		✓	✓			✓	
Diffusion of Innovations.Klingelhoefer, Stefan. (2019). Rogers (1962)	ResearcharArticle				✓		✓	✓			✓	
Diffusion of Innovations. Dearing, James & Lee, Sangwon. (2016).	Research Article				✓		✓	✓		✓		
Educating Intuition Robin M Hogarth (2001)	Research book	✓	✓	✓			✓			✓	✓	✓
Diffusion of Innovations and Personal Network. Tsutsui, Mariko. (2018).	Conference paper	✓			✓		✓	✓			✓	✓
.Diffusion of innovations and determinants of its success. Nowakowski, Marcin & Nowakowska, Barbara. (2017). .	Conference paper	✓			✓		✓	✓		✓	✓	
Diffusion of innovations in dynamic networks. Greenan, Charlotte. (2014).	Research Article	✓			✓		✓	✓		✓		

Summary of Literature Review (Contd.)													
Title Author(s) (Year)	Category	Literature Reviewed	Focus Issue			Context		Data Type		Methodology			
			Consciousness	Metacognition	Diffusions of Innovation	Indian	International	Qualitative	Quantitative	Exploratory	Descriptive	Analytical	
Power of your subconscious mind DR Joseph Murphy (1962)	Research Book	✓	✓	✓			✓	✓		✓	✓		
Diffusion of Innovations and Personal Network. Tsutsui, Mariko. (2018).	Research Book	✓			✓		✓	✓		✓			
Discourses on Radhasoami Faith PGH Maharaj Sahab Pandit Brahm Sankar Misra (1960/2004)	Research Book	✓	✓	✓		✓		✓			✓	✓	
Progress of Education in Dayalbagh Basant 1915- Basant 2005 DEI University Publication (2005)	Research Book	✓	✓	✓		✓		✓		✓	✓		
Radhasoami Faith - The ultimate reality Centre for consciousness studies, DEI (2007)	Research Article	✓	✓			✓		✓			✓		
On systems modelling off macrocosm and Microcosm in the domain of the spiritual consciousness Revd Prof P.S.Satsangi (2008)	Research Paper	✓	✓			✓		✓			✓	✓	
Neutral – environmental cognitive spiritual phenomenology Revd Prof PS Satsangi (2012)	Research Paper	✓	✓			✓		✓			✓	✓	
Eastern philosophy in the spiritual traditions off oriental saints: an interpretive structural model representation Revd Prof PS Satsangi (2012)	Research Paper	✓	✓			✓		✓		✓	✓	✓	
Quantum Consciousness. The Guide to Experiencing Quantum Psychology Wolinsky (1993)	Research Book	✓	✓				✓	✓			✓	✓	

Summary of Literature Review (Contd.)												
Title Author(s) (Year)	Category	Literature Reviewed	Focus Issue			Context		Data Type		Methodology		
			Consciousness	Metacognition	Diffusions of Innovation	Indian	International	Qualitative	Quantitative	Exploratory	Descriptive	Analytical
Radhasoami Faith : The ultimate reality Revd Prof P.S.Satsangi (2017)	Conference Paper	✓	✓	✓		✓		✓			✓	✓
Measuring consciousness Quotient- A study of its influence on Employee's work performance and organizational outcomes Ovidiu (2013)	Research Paper	✓	✓				✓		✓	✓		✓
Consciousness Quotient Inventory Improvement: Qualitative Study Using Cognitive Interviewing Approach Ovidiu, Madalin, Constaninescu, L, Constaninescu,P, BUtucescu, A (2013)	Research Paper	✓	✓				✓		✓	✓		✓
Consciousness Quotient Inventory Improvement: Qualitative Study Using Cognitive Interviewing Approach Ovidiu, Madalin, Constaninescu, L, Constaninescu,P, BUtucescu, A (2013)	Research Paper	✓	✓				✓		✓	✓		✓
In Search of Conscious Leadership: A Qualitative Study of Postsecondary educational Leadership Practices Jones,V (2012)	Case study	✓	✓				✓		✓	✓		✓
Demystifying the consciousness quotient Hyden, G & Jager, K (2011)	Research Paper	✓	✓				✓		✓	✓		✓
The consciousness quotient: a new predictor of the students' academic performance Ovidiu, Mihai (2011)	Research Paper	✓	✓				✓		✓	✓		✓
Consciousness Quotient (CQ) CQ Inventory (CQI) Ovidiu, Brazdau (2004)	Research Paper	✓	✓				✓		✓			✓

Summary of Literature Review (Contd.)													
Title Author(s) (Year)	Category	Literature Reviewed	Focus Issue			Context		Data Type		Methodology			
			Consciousness	Metacognition	Diffusions of Innovation	Indian	International	Qualitative	Quantitative	Exploratory	Descriptive	Analytical	
Yoga asanas and meditation for 20 weeks can increase your Consciousness Quotient Ahuja,S (2015)	Article	✓	✓			✓			✓	✓		✓	
Signs you have a raised consciousness	Article		✓				✓	✓		✓	✓		
Exploring intuition and its role in managerial decision making Dane, Prat (2007)	Research Article	✓	✓			✓		✓		✓			
Mysticism: A Study in Nature and Development of Spiritual Consciousness Underhill (2013)	Research Book	✓	✓				✓	✓		✓	✓		
Signs you're shifting to higher level of consciousness	General Article		✓				✓	✓		✓		✓	
The Power of the Elevation of Consciousness: Soul Restructuring Johanna Bassols (2018)	Research Paper	✓	✓				✓	✓		✓		✓	
Levels of consciousness – a Buddhist perspective	Article		✓			✓		✓			✓		
Levels of consciousness and self-awareness: A comparison and integration of various views Morin (2006)	Research Paper	✓	✓				✓	✓				✓	

Summary of Literature Review (Contd.)												
Title Author(s) (Year)	Category	literatureReviewed	Focus Issue			Context		Data Type		Methodology		
			Consciousness	Metacognition	Diffusionsof Innovation	Indian	International	Qualitative	Quantitative	Exploratory	Descriptive	Analytical
Developing Informed Intuition for Decision-Making Jay Liebowitz (2019)	Research book	✓	✓				✓	✓		✓		
The Conscious Competence Ladder The Development of Students' Metacognitive Competences.	Magazine article		✓				✓	✓		✓		
The Development of Students' Metacognitive Competences. (2010)	Case study	✓		✓			✓	✓		✓		
Intuition and Insight: two concepts that illuminate the tacit in science Education (Polanyi, 1966/2009)	Conference Paper	✓	✓	✓			✓		✓		✓	
Consciousness: A user's guide Zeman, Adam. (2002)	Research Paper	✓	✓				✓	✓		✓	✓	
Why God won't go away: Brain science and the biology of belief Newberg, Andrew, D'Aquili, Eugene, and Rause, Vince. (2001)	Research book	✓	✓				✓	✓		✓	✓	
Awakening intuition Frances E. Vaughan (1979)	Research book	✓	✓	✓			✓	✓		✓	✓	
Thinking Fast and Slow Daniel Kahneman (2011)	Research book	✓	✓				✓	✓		✓	✓	
How matter becomes mind Bertolero, Max and Bassett, Danielle S. (2019)	Research Article	✓	✓				✓	✓			✓	✓
The Universe speaks in numbers Graham Farmelo (2019)	Research book	✓	✓				✓	✓		✓	✓	✓

Summary of Literature Review (Contd.)													
Title Author(s) (Year)	Category	Literature Reviewed	Focus Issue			Context		Data Type		Methodology			
			Consciousness	Metacognition	Diffusions of Innovation	Indian	International	Qualitative	Quantitative	Exploratory	Descriptive	Analytical	
Diffusion of Innovation. Di Benedetto, Anthony. (2015).	Conference paper	✓			✓		✓	✓		✓		✓	
Diffusion of Innovation. Computers, informatics,Gonzalez, Laura & Aebersold, Michelle & Fenske, Cynthia. (2014).	Case Study	✓			✓		✓	✓		✓			
The Diffusion of Innovations: Some Reflections. Stoneman, Paul. (2018).	Research Article	✓			✓		✓	✓			✓	✓	
The Diffusion of Innovation. Taylor, Earl. (2013).	Research Article	✓			✓		✓	✓			✓		
Distance (Still) Hampers Diffusion of Innovations. Graevenitz, Georg & Graham, Stuart & Myers, Amanda. (2019).	Research Article	✓			✓		✓					✓	
Intermediality and the Diffusion of Innovations. Rice, Ronald. (2017)	Research Article	✓			✓		✓	✓		✓		✓	
Diffusion of Innovations: Patenting orAronov, Iosif & Zazhigalkin, Aleksandr. (2017).	Research Article				✓		✓	✓		✓			

Table 2: Summary table of Literature Review

2.5 **Summary of Research gap: Global perspective**

While the variables of both consciousness and diffusion of innovation are relatively old concepts and much research has already been done on them and seem very thoroughly researched via papers published there seem to be none to study the effect of one on the other - on the effect of a changed or enhanced level of consciousness on the rate of diffusion of innovation. This effect needs to be studied amongst many others since a change in cognitive attributes is a very fundamental change which is bound to make changes in perspective and effect all other cognitive functions.

SECTION 3

3. CONCEPTUAL FRAMEWORK

There is always a purpose attached to any kind of adoption or transformation that is strategically relevant. In case of the individual this purpose is the output received. The output has an importance as it conveys the success or the failure report and acts as an important performance indicator and the displays the competitiveness (Woodruff et al, 2008). The outcome can be tangible as well as intangible like in the form of conformity level achieved, satisfaction, etc. Thus, it can be said that the output is a package of some variables called 'value' that each person attempts to maximize. The ultimate value maximisation is possible when the tasks at each stage are collectively maximized as per their own defined standards. In case of the rate of diffusion of innovation, cognitive attributes and leadership systems play a catalytic role that smoothens the adoption process . Education intervention is considered as strategic planning in case of consciousness to enhance performance and productivity (Susanty et al., 2017).

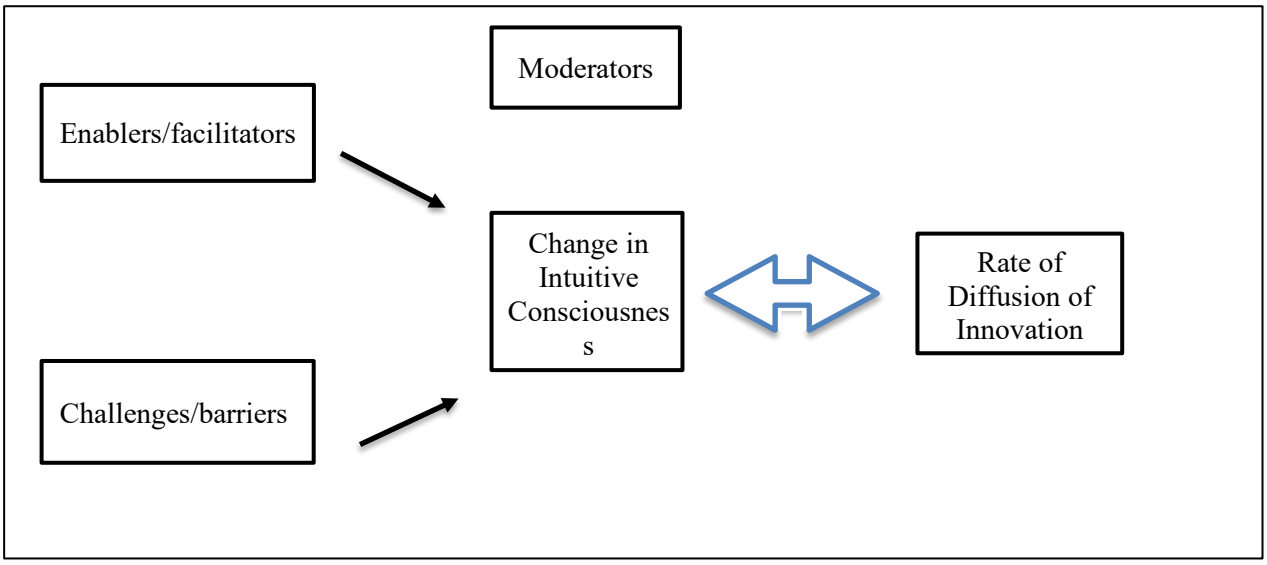


Figure 3: Self-Constructed Conceptual Framework

Enablers and Challenges for enhancement of intuitive consciousness : For any kind of adoption, there are some enabling or the driving factors that calls for the need of adoption. For example, there can be possible enablers for intuitive consciousness like; education, spirituality, self-awareness, meditation, music, art and beauty, feeling of belonging. Beside these enablers and challenges, other variables for intuitive consciousness in students of higher education will be identified. Further the variables of the effect of an enhanced consciousness on the on the rate of diffusion of innovation will be identified.

Moderators: Generally, moderator refers to such factors that moderate the adoption of anything. These factors are beyond the control of an individual entity. The moderating factors for consciousness are spiritual blessings, spirit of brotherhood in the environment, level of consciousness of people closely associated and those of ROD of Innovation can be the role of concerned demographics, prevailing competition, media, networking, communication etc. Rest will be identified in the research proceedings.

Value changes: In general, the value deliverables for any type of person can be the conformity to optimizations, maximization attributes and quality building functionality, achieving higher values, meeting optimal standards, accuracy, reduced wastages, minimized error rates etc.

SECTION 4

OVERVIEW OF PROPOSED RESEARCH

4.1 Need of the study

The study of intuitive consciousness is no longer confined to philosophy discourse. It has gained credibility in enhancing individual potentialities in professional spheres like medicine, bioengineering, quantum mechanics amongst many others. The potential of intuitive consciousness in the educational field has been initiated by several institutions but it's adaption and wide scale implementation needs to be earnestly pursued.

The present study is designed to observe with the help of questionnaires the impact of intuitive consciousness levels of the students of higher education before and after an educational intervention on their ability to create a visionary and leadership aspect in the diffusion of innovation model. The main purpose of this study is to maximize the intuitive consciousness levels in students to make them industry leaders of tomorrow by being more proactive in their investment into innovation and to enhance their own innovation skills. Also, strategic framework would be developed with the help of hierarchical model under system methodology to resolve the complexity. This research has been proposed by considering the aim of the Dayalbagh educational institute to create a complete man. Thus, the main purpose is to develop a strategic framework for maximizing the value deliverables of the students through the educational intervention.

Research in this area also helps to create a framework for understanding the human quest for knowledge, individual development of consciousness, and higher cognitive states of spiritual experience. Peace, happiness, joy, and love are states of being that only come from within. Consequently, to experience these states fully one must become self-aware and focus your attention and energy on discovering Universal Truth in all its forms. This study will represent a pilot direction for the consciousness quotient usage in the educational field. Due to its importance in human psychology and individual differences, the assessment of consciousness qquotient leads inevitably to the educational field. Academic success predictors usually consist of cognitive measures, pertaining to mental ability or intelligence; and non-cognitive measures, especially personality traits.

This study will greatly help the budding entrepreneurs of tomorrow and present to reduce the inherent risk in the respective industries by giving them a more comprehensive cognitive skills for decision making, value judgement, networking skills and enhancing almost all leadership skills.

It would be Interesting observe the change of variables if any in the rate of diffusion of innovation when level of consciousness is change. Since all the current variable are cognitive in nature and a change of consciousness levels would necessarily bring about a change in the cognitive functions of an individual it would not be erroneous to expect a whole hidden set of variables to further drive the Rate Of Diffusion.

4.2 Objectives of the study

The proposed research is aimed at accomplishing the following objectives:

Objective 1: To study the present state of intuitive consciousness of the students of Dayalbagh Educational Institute

Objective 2: To develop intervention programme for raising intuitive consciousness.

Objective 3: To observe the change in the intuitive consciousness levels of students as the result of the intervention.

Objective 4 : To identify the variables of rate of diffusion of innovation resulting from the Changed consciousness levels and develop a model

Objective 5 : To determine the change in the rate of diffusion of innovation after the intervention

Objective 6:.To study the effect of change in intuitive consciousness on the diffusion of innovation based on the developed model.

Objective 7: to develop a dynamic systems model of rate of diffusion of Innovation for its maximisation.

4.3 Hypotheses

4.3.1 Hypothesis 1 :There is a significant change in the intuitive consciousness of the students after the intervention

4.3.2 Hypothesis 2: There is a significant change of rate of diffusion of Innovation after the intervention

4.4 Research methodology 31

4.4.1Research design 31

4.4.2 Sample Plan 31

4.4.3 Sampling techniques 31

4.4.4 Sample Size 31

4.4.5 Data collection 31

4.4.6 Expert profile 32

4.4.7 Tools and techniques to be used (proposed) 32

4.4.8 Tools and techniques of the Systems approach 32

4.4.9 Phases of proposed research 34

4.4.10 Analysis of the case study approach 35

4.4 Research Methodology

4.4.1 Research design

The research design would be a mix of exploratory, descriptive and analytical

4.4.2 Sample Plan

At least one governmental and one non-governmental educational institute in India will be taken to hold an educational intervention in a series of workshops for about 3 to 4 weeks .The respondents will be students and other associates of higher education.

4.4.3 Sampling technique:

The study will be conducted on focus groups. Thus, a non-probability purposive sampling method would be chosen.

4.4.4 Sample size :

The Sample size would be 300-400

4.4.5 Data collection

Primary Data: educational intervention would be given in a series of workshops through a questionnaire in a pre and post study. The proposed study is based on the application of the systems approach. The primary data in this case is collected through the Delphi Method.

4.4.6 Experts Profile

Experts will be from various profiles like neurologists, quantum scientists, psychologists, professors etc. working on the consciousness domain

4.4.7 Tools and techniques to be used (proposed) for Intuitive Consciousness

Questionnaire and interview method would be used for the pre and post study for the consciousness workshops and other tools as applicable.

Assessment instruments of the conscious experience available are:

Psychological Well-Being Scales (Ryff, 1995)

Mindfulness Attention and Awareness Scale-MAAS (Brown and Ryan, 2003)

Freiburg Mindfulness Inventory (Walach et al., 2006)

Toronto Mindfulness Scale (Bishop et al., 2004)

The Kentucky Inventory of Mindfulness Scale (Baer, Smith, Allen, 2004)

The Revised NEO Personality Inventory (Costa & McCrae, 1992)

The Emotional Quotient Inventory (Bar-On, 1997)

The Consciousness Quotient (CQ) Theory and the CQ Inventory (Brazdau, 2008) - approval to use sought and received.

A self-structured questionnaire will be administered also

After an in-depth study of the tools suitable tools can be used.

4.4.8 Tools and techniques of the Systems approach

(a) Delphi Method: Delphi method is used when face-to-face interaction is either not possible or

not desirable. It is a strong structured questionnaire-based survey method of capturing the experts' views about matters on which detailed insights are required. The results obtained from the first round are presented to the same experts for review purpose and their responses in the light of collective feedback are displayed and discussed with the group concerned. The results obtained after the second round are checked to verify the level of consensus and variance. If the desired consensus is found lacking, the whole exercise is repeated until the consensus is reached.

(b) CLD: A causal loop diagram (CLD) is a causal diagram aids in visualizing how different variables in a system are interrelated. In the system dynamics methodology, a problem or a system (e.g., ecosystem, political system or mechanical system) may be represented as a causal loop diagram. (Sterman, John D. 2000).

A causal loop diagram is a simple map of a system with all its constituent components and their interactions. By capturing interactions and consequently the feedback loops (see figure below), a causal loop diagram reveals the structure of a system. By understanding the structure of a system, it becomes possible to ascertain a system's behaviour over a certain time period.(Meadows, Donella, 2008).

(c) Stock and flow :The last section on causal loop diagrams showed that to go beyond simply analysing and visualizing the feedback structure of a system, a more powerful technique is needed:

1.a technique that visually distinguishes between the parts of the system and what causes them to change

2.a technique that allows for precise – quantitative – specification of all the system's parts and their interrelation

3. a technique that can provide a basis for simulating the behaviour of the system over time

Causal loop diagrams aid in visualizing a system's structure and behaviour, and analysing the system qualitatively. To perform a more detailed quantitative analysis, a causal loop diagram is transformed to a stock and flow diagram. A stock and flow model helps in studying and analysing the system in a quantitative way; such models are usually built and simulated using computer software.

4.4.9 Phases of proposed research

The proposed research study will be conducted in the following phases:

Phase 1: Study the present state of intuitive consciousness of the students

In the beginning stage, the researcher will attempt to know the present status of intuitive consciousness of the students of DEI. A pre study will be conducted with the help of a questionnaire.

Phase 2 – Develop an educational intervention programme for raising intuitive consciousness.

An educational intervention module comprising of facilitates of intuitive consciousness will be designed like physical activity, meditation, music and art aesthetics, values education, time and stress management social sensibilities amongst many others.

Phase 3 – Observe the change in the intuitive consciousness levels of students as the result of the intervention.

A post test will be conducted with the help of questionnaires.

Phase 4 - Identify the variables of ROD of innovation resulting from the Changed consciousness levels and develop a model

The enabling and the challenging factors for the rate of diffusion of innovation would be identified. These factors will be identified through the Delphi methods.

Phase 5 - Determine the change in the rate of diffusion of innovation after the intervention

Phase 6 - Study the effect of change in intuitive consciousness on the diffusion of innovation based on the developed model.

Phase 7 - Develop a dynamic systems model of ROD of Innovation for its maximisation.

The last phase will involve determination of the optimal strategy and action plan for possible optimal level of value maximisation. A causal loop diagram would be developed on the basis of the discussion or workshop session with domain experts. The system dynamics technique would then be used to conduct simulation analysis in order to come up with optimal strategy.

4.4.10 A Case Study Approach

Development of case study with special reference to Dayalbagh Educational Institute

The researcher may include case studies, wherever applicable, as validation tool to support the claim of the reports and its finding. The application, reports and/or reported business model would also be explored as data source.

SECTION 5

PROPOSED CHAPTERIZATION

The proposed research will contain the following chapters:

- Chapter 1: Introduction
- Chapter 2: Review of literature
- Chapter 3: Status of diffusion of innovation and intuitive conscious levels in students of higher education
- Chapter 4: Research design and methodology
- Chapter 5: Data collection and analysis
- Chapter 6: Results and interpretations

- ➢ Chapter 7: Strategic framework for gaining value maximization
- ➢ Chapter 8: Conclusion, implications, and direction for future research
- ➢ Bibliography and references
- ➢ Appendix

SECTION 6

REFERENCES

1. Rogers, E. (1962). Diffusion of Innovation.

2. Weil, A. (2018). Diffusion of Innovation. Health Affairs, 37.

3. Roger, E. (2018). Diffusion of Innovation .

4. Sharma, S. A. (2015, November). Consciousness quotient as a predictor of executive functioning. Mier Journal of educational studies, trends and practices, 5(2).

5. Hambrick, M. (2019). Investigating GoPro and Its Diffusion of Innovations.

6. Patterson, J. (2011). Metacognitive Skills. Kreutzer J.S., DeLuca J., Caplan B. (eds) Encyclopedia of Clinical Neuropsychology.

7. Morin, A. (2006). Levels of consciousness and self-awareness: A comparison and integration of various neurocognitive views. Consciousness and cognition. , 15.

8. Dane, E. &. (2007). Exploring intuition and its role in managerial decision making. Academy of Management Review., 32.

9. Underhill, E. (2002). Mysticism: A Study in Nature and Development of Spiritual Consciousness. Dover Publications .

10. Underhill, E. (2006). A Little Book for Normal People . Cosimo Classics .

11. Ricker, M. (2019, August 8). Twelve Signs That You Are Shifting To A Higher Level Of Consciousness. A consciousness rethink.

12. Mara, D. (2010). The Development of Students' Metacognitive Competences. International Journal of Computers, Communications & Control,, Vol. V , pp. 792-798 .

13. Ozgur Dedehayir, R. J. (2017). Innovators and early adopters in the Diffusion of Innovations: a literature review. International Journal of Innovation Management, 21(8).

14. Mikkelsen, F. (2019, June 10). The Diffusion and Innovation of Muslim Organizations in Denmark. Journal of Muslim Minority Affairs, 39(2), 157-176.

15. Dearing, J. &. (2016). Diffusion of Innovations. In J. &. Dearing, International Encyclopedia of Communication Theory and Philosophy (pp. 543-548). Wiley-Blackwell.

16. Gonzalez, L., Aebersold, M., & Fenske, C. (2014, Computers, Informatics, Nursing). Diffusion of Innovation. Computers, Informatics, Nursing, pp. 201-204.

17. Stoneman, P. (2018). The Diffusion of Innovations: Some Reflections. International Journal of the Economics of Business. .

18. Graevenitz, G., Graham, S., & Myers, A. (2019). Distance (Still) Hampers Diffusion of Innovations. SSRN, (p. 27).

19. Rice, R. E. (2017, June 30). Intermediality and the Diffusion of Innovations. Human Communication Research, 43(4).

20. Aronov, I. &. (2017). Diffusion of Innovations: Patenting or Standardization. International Journal of Mathematical, Engineering and Management Sciences., 2(2), 64-73.

21. Greenan, C. (2014). Diffusion of innovations in dynamic networks. Journal of the Royal Statistical Society: Series A (Statistics in Society), 178(1).

22. Sharma, S., & Ahuja, S. (2015). CONSCIOUSNESS QUOTIENT AS A PREDICTOR OF EXECUTIVE FUNCTIONING. MIER Journal of Educational Studies, Trends and Practices, 5(2).

23. Patel, H. (2007). Factors influencing technology adoption: A review. Conference on Information Management in the Networked Economy, (pp. 416-431).

24. Murphy, D. J. (1962). The power of your subconscious mind. Amazing reads.

25. Kahneman, D. (2012). Thinking, Fast and slow. Penguin Random house UK.

26. Hogarth, R. M. (2001). Educating Intuition. Chicago: The University of Chicago Press.

27. Vaughan, F.E. (1979). Awakening intuition. Anchor Books

28. Bertolero, M., & Bassett, D.S. (2019), How matter becomes mind.

29. Farmelo, G (2019). Beyond a materialistic world view: Galileo Commission.

30. Farmelo, G (2019).The universe speaks in numbers.

Websites

1. Consciousness quotient institute website -https://www.consciousness-quotient.com/ [accessed on June 17, 2019].
2. Scientific American website - https://www.scientificamerican.com[accessed on July 23, 2019].
3. Economic Times website -https://economictimes.indiatimes.com [accessed on Aug 20, 2019].
4. A consciousness rethink (U.S.A.) -https://www.aconsciousrethink.com [accessed on Aug 9, 2019]
5. Operational Meditation – http://operationmeditation.com [accessed on July 23, 2019]
6. Line Educational Government website USA –https://lincs.ed.gov [accessed on Jan 7, 2019] .
7. Board of Innovation- https://www.boardofinnovation.com [accessed on Aug 31, 2019]